

963 South Delaware
Springfield, MO 65802
(417)831-4858
November 6, 1982

Stephen D. Short, Water Pollution Control Inspector II
Department of Public Works, City of Springfield
830 Boonville Avenue
Springfield, MO 65801

Re: gasoline vapors and explosive atmosphere in home

Dear Mr. Short:

Thank you for your letter of October 28, 1982, outlining my problem and the steps that your office has taken to avert the potential disaster which threatens all of the homes on the polluted sewer lines. I appreciate the diligent attention which the City of Springfield continues to give to this serious problem.

In your letter you indicated that "you or ^{NOV 9 1982} your family have been told on several occasions, ...(the absence of a clean out plug subjects us to danger)." It should be pointed out that we replaced the clean out plug immediately upon the first time that we were told that a plug should be in the floor drain. We did not tell your office that the clean out plug has been missing since we moved in to the house two years ago. What we told your office was, that we have had no occasion to investigate the drain's condition at all, until the problem with the fumes in the basement began. Representatives from your office and that of the Fire Marshall's office made at least two trips to our home, and flushed out the drain to the street with their hoses before anyone made any comment to us concerning the clean out plug. We have no way of knowing whether the clean out plug was missing before the time that your representatives pointed it out to us.

You should be aware that, though the clean out plug is now in place, we also keep the drain covered with plastic. That does seem to help with the fumes. However, our concern about the potentiality of a disaster from a match dropped into the sewer line at any point along Grand street is not alleviated. Plastic can protect us from fumes, but would do little to protect us from "an explosive atmosphere."

I appreciate the fact that your investigation is continuing.

Sincerely,


Charles W. Hedrick

cc: H. Cole, P.E., Sanitary Engineer
B. Schaefer, P.E., Superintendent of Sanitary Services
D. Bittle, Chief, Fire Marshal

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM

ATTENTION OF Gary Gourley
DEPARTMENT Fire Marshal

DATE 11-22-83

This office has experienced several problems with high Lower Explosive Limit readings in the area of Grand and Glenstone. It appeared this problem was not related to a separate problem at 1003 S. Glenstone. Our investigation indicated two possible sources: (1) Abandoned underground tanks at 959 S. Glenstone (2) One abandoned underground tank at 1619 E. Grand.

This office and the Fire Department have made numerous trips and investigations at the Hedrick residence, 963 S. Delaware. Our investigation traced elevated L.E.L.'s to a sanitary sewer manhole west of 959 S. Glenstone. Our records indicate we discovered product in at least one tank at both locations.

If we can be of any assistance please contact us.

963 + 951 S. DELAWARE

SIGNED Stephen Short

October 28, 1982

Mr. Charles W. Hedrick, Sr.
963 S. Delaware
Springfield, Missouri 65802

Dear Mr. Hedrick:

Mr. J. D. Slaughter investigated a complaint of gasoline vapors entering your home at 8:30 p.m., October 26, 1982. Mr. Slaughter's report indicates he observed a gasoline odor in the basement near a floor drain. This investigation, as well as previous investigations, indicate vapors emanating from the sanitary sewer are short circuiting the building plumbing venting system and entering your home through a clean out opening in the floor drain.

This office fully agrees with you that the potential for an explosive atmosphere are possible and should be reckoned with. Another hazard, just as important, is the entrance of sewer gases into your home. The term "sewer gas" is used to address the gaseous products of natural decay and the myriad products that could evolve from the mixing of residential, commercial, and industrial wastes in the sanitary sewer. It is possible that wastes from your home could collect and decay, producing sewer gas.

The City of Springfield has investigated and will continue to search for the source of the gasoline that has entered the sewer system. The discharge of gasoline, or other flammable liquids, into the sewer is prohibited and enforced by ordinance.

You or your family have been told on several occasions, the absence of the clean out plug subjects the occupants of the building to a dangerous situation. The installation of the missing clean out plug in your basement floor drain should eliminate the entrance of gasoline fumes and sewer gases. Each day you hesitate to do so subjects your home and family to unnecessary risk.

You have told this office that since you moved into the home, about two years ago, the floor drain clean out plug has been missing and until recently no problems have been encountered. Our response to this statement is that for two years your home has been without the primary device to protect your health and safety from this type of hazard.

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Mr. Charles W. Hedrick, Sr.
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If you have any questions, please call 864-1924.

Yours truly,

Stephen D. Short
Water Pollution Control Inspector II
Surveillance & Enforcement

SDS:js

cc: H. Cole, P.E., Sanitary Engineer
B. Schaefer, P.E., Superintendent of Sanitary Services
D. Bittle, Chief, Fire Marshal

CITY OF SPRINGFIELD
INTER-OFFICE MEMORANDUM


ATTENTION OF _____ FILE _____

DATE October 11, 1982

DEPARTMENT _____

On Sunday, October 10, 1982, at 10:30 P.M. I received a call from the Fire Department dispatcher that Charles W. Hedrick of 963 S. Delaware was getting gasoline fumes in his basement. I met the Fire Marshal, Gary Gorley, on Delaware and he had gotten a reading of 18% L.E.L. on his explosion meter in the basement floordrain. He advised Mr. Hedrick to run water into the drain. Gary Gorley and I then checked the manhole above his lot, but didn't get a reading. The two manholes below the lot had readings of 10% L.E.L. The flusher was called and the main in the alley and the main on Grand Street were flushed.

cc: Robert R. Schaefer, P.E., Superintendent of Sanitary Services
Henry Cole, P.E., Sanitary Engineer


Karen Chandler
SIGNED Water Pollution Control Inspector II
Surveillance & Enforcement

963 S. DELAWARE

February 22, 1990

Memo to File
951 South Delaware

On February 20, 1990 Karen Chandler and Steve Short accompanied Jerry Cody and Bill Crossland from the Fire Department in an inspection of 951 South Delaware to investigate a complaint of an oil-like liquid entering the basement of the residence. The home is a late 1940's brick structure with a 2/3's basement under the west portion of the structure. Gas and water mains are located along Delaware Street. Service lines enter the basement on the south side. Both natural gas and water lines have been replaced in the last few years. The sanitary sewer main is located in an alley in the rear of the lot. The home drains by gravity to the sewer. The basement has a stool and several floor drains. One floor drain in the southwest quadrant receives the water from an automatic washer through a hose to a removed cleanout plug in a floor drain. The home has a natural gas furnace installed within the last five years, by the current owners who's C.U.'s initial date is 11/84. It has a coal chute door on the south side of the basement. There is a small concrete footing located next to the outside basement wall just north of where the basement wall extends to the west for the outside yard entrance. The footing does not serve any purpose today, but may have served as a fuel oil tank foundation. This is due west of the sewer pipe that penetrates the basement floor that provides the loss of integrity that has allowed the pollutant to enter the structure.

The owners, Morris and Pearl Beckham guided us to an area at the base of the interior stairs to the basement where the sanitary sewer pipe penetrates the basement floor to serve the main floor. The pipe is located just inside the basement wall and near the center of the west wall. There is an outside entrance stairway a few feet to the south of the sewer pipe. The outside entrance area is a continuation of the basement concrete wall and appears to have been poured at the same time. The pollutant observed is little more than a stain on the concrete floor, while a floor mat that had been used to cover the stain smells very strongly of a diesel like compound. Similar but less pronounced stains were observed in several other locations at seems or cracks in the floor. One area of special importance is the installation of what Mrs. Beckham called "perforated pipe" by Charles Howell, Hometech Water Professionals, 869-1535, in 1985 or 1986. She indicated the contractor jackhammered the floor and installed the pipe to eliminate a water seepage problem in the basement. The extent of the project can be estimated from the ribbon patch in the concrete floor that extends from a floordrain near the centerwest portion of the basement east to the east basement wall and then south along the east wall approximately ten feet. This appears to be a illegal connection of a groundwater footing drain to the sanitary sewer. This possibly could have played a significant role in the

963+ 951 S. Delaware

current problem by lowering the high groundwater table so that a pollutant in the soil outside the basement wall could follow the cone of depression and migrate under the basement floor.

The yard of 951 South Delaware and surrounding homes were investigated for signs of fuel oil tanks, drop tubes, or other obvious signs of hydrocarbon contamination. None were observed. 955 South Delaware, occupied by Mr. Coleman, was also investigated. He is in excess of 90 years old and moved in the home in 1940. He could not recall the Beckhams home ever using fuel oil. His basement was investigated with no indications of any similar pollutant problem. The basement had several active groundwater leaks that flowed across the floor to a four inch clay pipe located in the south basement wall, floor interface. This pipe does not appear to be connected to the sanitary sewer and may be tributary to a storm sewer. We also received permission from Mr. Coleman to pump a old hand pump in his backyard. A few gallons was pumped and no odor or sheen was observed. We did not inspect the Hedrick home at 961 South Delaware.

We did observe some elevated L.E.L. readings in the sanitary sewer in Grand Street.

Stephen Short
Water Pollution Control Inspector
Surveillance and Enforcement

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INTER-OFFICE MEMORANDUM

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cc: Robert R. Schaefer, P.E., Superintendent of Sanitary Services
Henry Cole, P.E., Sanitary Engineer

963 S. Delaware

Karen Chandler

Karen Chandler
Water Pollution Control Inspector II
SIGNED Surveillance & Enforcement